

## **CLAIMS**

What is claimed is:

- 5    1. A motor housing for mounting within a range hood body used to exhaust gases from above a cooking surface, said motor housing comprising:

an upper section having a top surface and a first side perimeter surface extending away from said top surface;

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a lower section having a bottom surface and a second side perimeter surface extending away from said bottom surface;

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the edge of one of said first or second side perimeter surfaces having cooperating projections with a gap therebetween; and,

the edge of the other of said first or second side perimeter surfaces being adapted to be inserted in said gap between said cooperating projections to be frictionally retained therein.

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2. The motor housing of claim 1 wherein said first side perimeter surface has said cooperating projections and the edge of said second side perimeter surface is adapted to be inserted in said gap between said cooperating projections to be frictionally retained therein.

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3. The motor housing of claim 2 further comprising a plurality of protrusions on said second side perimeter surface.

4. The motor housing of claim 3 wherein said protrusions are spaced from said edge of said second side perimeter surface a maximum distance equal to the depth of said gap between said cooperating projections.
- 5 5. The motor housing of claim 1 further comprising a reinforcing assembly.
6. The motor housing of claim 5, wherein said reinforcing assembly comprises:
- at least one reinforcing strap;
- 10 one fastening means for each reinforcing strap.
7. The motor housing of claim 6 wherein a plurality of said fastening means are spaced about the perimeter of said motor housing.
- 15 8. The motor housing of claim 6 wherein said fastening means comprises a pair of aligned fasteners, one fastener extending perpendicularly from said upper section and one fastener extending perpendicularly from said lower section.
- 20 9. The motor housing of claim 8 wherein said reinforcing strap comprises two holes, separated to allow one hole to mesh with each fastener.
10. The motor housing of claim 9 wherein each of said fasteners comprises a pin and cotter pin.
- 25 11. The motor housing of claim 9 wherein each of said fasteners comprises a self-locking pin.
12. The motor housing of claim 9 wherein each of said fasteners comprises a nut and a bolt.
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